

REMARKS

The Office Action mailed September 18, 2008 notes that claims 10-18 are pending and rejects claims 10-18. No claims are amended. New claim 19 is added. No new matter is presented, and approval and entry are respectfully requested.

Claims 10-19 are pending and under consideration. Reconsideration is respectfully requested. The objections and rejections are traversed below.

Item 2: Rejection of Claims 10, 11, 13, and 16-18 under 35 U.S.C. 102(b)

In the Office Action, at page 2, item 2, claims 10, 11, 13 and 16-18 are rejected as being anticipated by Itoh et al. (U.S. Patent Application Publication Number 2002/0194361). This rejection is respectfully traversed below.

Itoh discusses a data sending/receiving device to achieve a stable transmission quality in an environment such as the internet in which there are various connection schemes and fluctuations in the transmission bandwidth. Itoh discusses a group determining portion 1201 which groups together receiving terminals 122 based on statistical information including RTT, packet loss, and jitter. Itoh does not discuss a method of message delivery to a geographic area using information related to "geographical area" rather it only uses statistical information discussed above. (See Itoh, paragraph [0001]; paragraph [0149]; Figures 2, 3, 7, 9, 12, 14, 16, 17, 24).

Thus, claim 10 is not anticipated by Itoh because claim 10 recites "monitoring an arrival rate of messages destined for a geographical area within a short time period" which is not disclosed by Itoh. In other words, claim 10 is related to monitoring the arrival rate of messages at a higher level router in a communications network. This implies that the higher level router is not the sender of messages, and the messages may have many different origins. Claim 10 provides for "a multicast group" to speed up forwarding the messages within the network. This does not require exchanging information between sending and receiving terminals as is done in Itoh. (See Itoh, paragraph [0149]; Figure 12 sending/receiving portion 1203).

Itoh also does not disclose "establishing, upon reaching a threshold, a multicast group for routing the messages to the **geographical area** by joining to the multicast group network devices responsible for delivering the messages." Rather, Itoh is related to transmission rate control in where gateways in which congestion is occurring are separated into groups in accordance with the state of congestion. Thus, Itoh forms multicast groups based on the state of congestion, determined via a transmission rate Q, but not target geographic area and as a result Itoh discusses usage of very different algorithms than found in the specification of the current Application. (See Itoh, paragraph [0147]).

Withdrawal of the rejection is requested.

The dependent claims depend from the above-discussed independent claims and are patentable over the cited references for the reasons discussed above. The dependent claims also recite additional features not disclosed by the cited references. For example, claim 11 recites "delivering any further messages destined for the geographical area arriving after the establishment of the multicast group via the multicast group." The Office Action, on page 2, item 4, asserts that paragraph [0152] discloses the above recited features. However, paragraph [0152] of Itoh is merely related to grouping receiving terminals based on their tendencies for transmission rate change, but does not disclose "delivering any further messages destined for the geographical area arriving after the establishment of the multicast group" because Itoh does not discuss establishing a multicast group based on geographical area. It is submitted that the dependent claims are independently patentable over the cited references.

Item 9: Rejection of Claims 12 and 14 under 35 U.S.C. § 103

In the Office Action, at page 3, item 9, claims 12 and 14 are rejected as being unpatentable over Itoh in view of Ekl et al. (U.S. Patent Application Publication Number 2003/0083087). This rejection is respectfully traversed below.

On page 3, in item 11 of the Office Action, it is admitted that Itoh fails to disclose "removing the multicast group after a predefined time period has elapsed within which no further messages destined for the geographical area arrive."

Ekl discusses reducing call set up times by pre-establishing semi-permanent multicast groups. (See Ekl, Abstract; paragraph [0012]). However, Ekl does not teach or suggest solving problems related to location based multicast services. Thus, Ekl does not cure the deficiencies of Itoh and claims 12 and 14 patentably distinguish over Itoh and Ekl, either alone or in combination.

Withdrawal of the rejection is requested.

Item 18: Rejection of Claim 15 under 35 U.S.C. §103

In the Office Action, at page 4, item 18, claim 15 is rejected as being unpatentable over Itoh in view of Asbun (U.S. Patent Application Publication Number 2007/0140241). This rejection is respectfully traversed below.

Asbun discusses improving the processing of already existing multicast data, by discussing a memory that has destination addresses and a counter value for each address to but is not related to automatically establishing new multicast groups in a network by monitoring the traffic load of geographic areas. (See Asbun, Abstract; Figure 2B; paragraph [0003]). Thus, Itoh and Asbun, either alone or in combination, do not teach or suggest "said monitoring of the rate of arrival is performed using a soft state message counter" as recited in claim 15.

Withdrawal of the rejection is requested.

New Claim 19

New claim 19, recites "monitoring a plurality of messages which are routed to a plurality of mobile devices located in a geographic area" and "sending the plurality of messages to the plurality of mobile devices by using the temporary multicast group." Thus, claim 19 patentably distinguishes over the cited references.

Summary

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections are overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the cited references. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

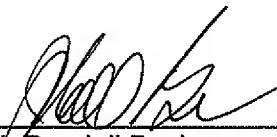
If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: 12/18/88

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